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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/500,072  | 04/15/2005  | Mauro Maritano       | 09877.0312-00            | 7161             |
| 22852   | 7590        | 01/23/2009           |                          |                  |
| FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER<br>LLP<br>901 NEW YORK AVENUE, NW<br>WASHINGTON, DC 20001-4413 |             |                      | EXAMINER<br>GRAY, JILL M |                  |
|   |             |                      | ART UNIT                 | PAPER NUMBER     |
|   |             |                      | 1794                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/500,072

**Applicant(s)**

MARITANO ET AL.

**Examiner**

Jill Gray

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anelli et al., 6,577,796 B2 and PCT Publication WO 00/21098 (hereinafter referred to collectively as Anelli) in view of Uemura et al., 5,134,036 (Uemura) and Kamachi et al., 5,187,226 (Kamachi), further in view of Snow et al, 6,350,431 B1 (Snow), for reasons of record.

Anelli is as set forth previously and discloses a telecommunications cable comprising an elongated element housing at least one transmitting element, said element comprising a water-soluble polymer material such as vinyl alcohol/vinyl acetate copolymer, as required by claim 1. See for example abstracts and entire documents. In addition, the elongated element is a tubular element comprising at least one sheath made from said water-soluble polymer material, comprising a double layer sheath in which the inner sheath is made from a water-soluble polymeric composition and the outer sheath is made from a conventional water-insoluble composition, and further comprising a third outer sheath made from water-soluble polymer material, as required by claims 18-20. Alternatively, Anelli discloses that the elongated element is a grooved core comprising at least one groove longitudinally disposed on the outer surface of said core, as required by claim 21. See for example '796, column 4, lines 35-62. As to the specific composition of the water-soluble polymer material, Anelli discloses that his

particular preferred embodiment comprises a vinyl alcohol/vinyl acetate copolymer that can be obtained by partial hydrolysis of the acetate groups of a polyvinyl acetate homopolymer. See column 5, line 50 through column 6, and line 2. Anelli discloses that his composition can contain conventional additives such as stabilizers and plasticizers, wherein at least 5% of the total weight of the composition is plasticizer, and can range from about 1% to about 30% by weight as required by claims 10-11. Additionally, Anelli discloses that the copolymer is present in amounts of at least 50% by weight and more than 75% by weight, per claims 8-9. See for example '796 column 10, lines 17-40 and column 17, lines 12-27. Anelli is silent as to the specific stabilizer.

Uemura discloses ethylene-vinyl alcohol copolymers produced by saponification of ethylene-vinyl ester (such as vinyl acetate) in the presence of an antioxidant of the type contemplated by applicants, namely, "IRGANOX 1098". See entire document and for example columns 3-5. Kamachi discloses vinyl alcohol polymers and copolymers with vinyl acetate that are produced by a process that includes hydrolysis in the presence of an antioxidant such as "IRGANOX 1098" which enhances the degree of polymerization in the presence of oxygen. See entire document, and for example, columns 5-7.

Regarding claims 1, 6-7, 12-17, and 22-26, Snow teaches compounds comprising backbone structures that are substantially similar to that of formula 1, wherein the compounds are of the type set forth by applicants in claims 6-7, 12-17, and 22-26. See entire document, for example, column 2, lines 35-40 and column 3-4. The compounds can be attached to surfactant molecules by means of linking groups and the

surfactant molecules have many utilities such as stabilizers. Note column 9, line 25 through column 10, and line 30. In addition, Snow teaches that the linking group can be a lysine, per claim 16. Note column 29, line 64 through column 28, line 5. As to the distance between the two hydrogen atoms, Snow teaches that it is the examiner's position that the teachings at column 43, line 27 through column 44 and line 50, would render obvious compounds having the requisite spacing, in the absence of factual evidence to the contrary. Applicants are invited to provide such evidence.

It would have been obvious to one having ordinary skill in the art to modify the teachings of Anelli by using as the stabilizer, the surfactant molecule taught by Snow with the reasonable expectation of obtaining the efficacious properties associated therewith.

Regarding claims 2-5, it is the position of the examiner that the discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.

Therefore, when considered as whole, the combined teachings of Anelli, Uemura and Kamachi and Snow would have rendered obvious the invention as claimed in present claims 1-26.

### ***Response to Arguments***

3. Applicant's arguments filed October 27, 2008 have been fully considered but they are not persuasive.

Applicants argue that Snow is directed to compounds designed and intended for completely different purposes than the hydrolysis stabilizer compound used in Anelli or

the claimed invention, and therefore, one of skill in the art would never have considered the reference alone or thought to combine it with the other prior art references.

Applicants further argue that the examiner has no basis to suggest that one skilled in the art would consider combining the light imaging contrast agents of Snow with the optical fiber cable of Anelli to arrive at applicants' claimed invention.

In this regard, it is the examiner's position that "Section 103 requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor", but does not require us to presume full knowledge by the inventor of prior art outside the field of his endeavor, i.e. of "non-analogous" art. In that respect, it only requires us to presume that the inventor would have the ability to select and utilize knowledge from other arts reasonably pertinent to his particular problem which would be expected of a man of ordinary skill in the art to which the subject matter pertains. *In re Antle*, 170 USPQ 285, 287 (CCPA 1971). In the present case, Snow clearly teaches that his compounds can be used as stabilizers in polymeric compositions. The skilled artisan concerned with polymeric compositions that are stabilized would have been reasonably motivated to look to the teachings of Snow with the reasonable expectation of success.

Applicants argue that the examiner has provided no evidence that the compounds of Snow have the claimed critical structure.

In this regard, Snow teaches the same compounds as contemplated by applicants. The same compounds necessarily have the same properties. Applicants have provided no clear factual evidence on this record to the contrary.

Applicants argue that the instant specification contains unexpected results achieved by addition of a suitable amount of hydrolysis stabilizer having the claimed molecular characteristics.

In this regard, it is the examiner's position that the showing in the specification is not commensurate in scope with the present claims. In particular, claims 1 and 2 require amounts much lower than the 1.57 mmole of compound.

No claims are allowed.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jill Gray  
Primary Examiner  
Art Unit 1794

/Jill Gray/  
Primary Examiner, Art Unit 1794